# (Loamy Bottomland)

Description: Deep, well drained or moderately well drained soils with

loamy surfaces and loamy or clayey subsoils. Soils in this subgroup occur on floodplains and terraces which receive extra moisture from adjoining areas. (Soils with a clayey subsoil have at least 14 inches of loamy material above the

subsoil.)

Limitations: Soils in this subgroup can have slight wetness and slight

salinity or alkalinity.

Soils: Kaski loam

Kaw silt loam

URA: 79 SUITABILITY EROUP: A-:

| species  | SPEI<br>ADAPTAB:<br>DRYLAND             | CIES<br>ILITY 1 /<br>IRRIGATED               | SPECIES<br>PRODUC-<br>TIVITY<br>2_/                  | GRAZING<br>PREFERENCE<br>3_/                   | STAND<br>ESTABLISH-<br>MENT 4_/                      |  | TILIZA<br>EDS 5<br>p          |                                    | Ph RRNGE<br>5_/  | DROUGHT<br>TOLERANCE   |
|--|---|--|--|--|--|--|-------------------------------|------------------------------------|--|--|
| WARN SEASON ERRSSES BERMUDAGRASS HARDIE MIDLAND BIG BLUESTEN KAN EASTERN GAMAGRASS INDIANGRASS CHEYENNE USAGE SMITCHGRASS BLACKHELL        | 55<br>55<br>55<br>7<br>7<br>6<br>7<br>7 | 85<br>85<br>85<br>8<br>8<br>8<br>8<br>8<br>8 | 9<br>9<br>9<br>5<br>6<br>10<br>5<br>6<br>6<br>5<br>6 | 5<br>4<br>5<br>7<br>7<br>7<br>7<br>7<br>5<br>5 | 2-3<br>2-3<br>2-3<br>2-3<br>2-4<br>1-3<br>1-3<br>1-2 | 1-3<br>1-3<br>1-3<br>0-1<br>0-3<br>0-1 | 0<br>0-5<br>0-5<br>0-5<br>0-5 | 1-2<br>1-2<br>1-2<br>0<br>0-1<br>0 | 5.5-8.0<br>5.5-8.0<br>5.5-8.0<br>6.0-7.5<br>5.5-7.5<br>5.5-7.5 | FAIR FAIR FAIR FAIR-GOOD FAIR-GOOD FAIR FAIR FAIR FAIR GOOD GOOD |
| COOL SEASON GRASSES ORCHARDGRASS LATAR REED CANARYGRASS I GREED RISE SMOOTH BROMEGRASS ACHENBACH LINCOLN SOUTHLAND TALL FESCUE KENTUCKY-31 | . 0033255454                            | 776655887888                                 | 67778866777767                                       | 7<br>7<br>6<br>6<br>7<br>7<br>7<br>7           | 1-2<br>1-2<br>1-2<br>1-2<br>1-2<br>1<br>1            | 1-5                                    |                               | 0-5                                | 5.5-7.0<br>5.5-7.0<br>5.5-7.0<br>6.2-7.0                       | POOR POOR POOR POOR POOR FAIR FAIR FAIR POOR POOR                |
| WHEATGRASS INTERMEDIATE SLATE TALL JOSE WESTERN BARTON   | 6<br>6<br>5<br>7<br>7                   | 7<br>7<br>8<br>8<br>8                        | 5<br>5<br>5<br>4<br>5                                | 4<br>4<br>4<br>5<br>5                          | 1-2<br>1-2<br>1-2<br>1-2<br>1-3                      | 1-2<br>1-2<br>0-1                      | 1-2<br>1-2<br>0-1             | 0-1<br>0-1<br>0-1                  | 7.0-8.5  | FAIR<br>FAIR<br>FAIR<br>FAIR<br>GOOD<br>GOOD                     |
| LEGUMES<br>ALFALFA (STANDARD<br>(RHIZOMATOUS   |   | 9  | 10<br>7  | 8  | 1-2  | 0-1<br>0-1                             | 1-3<br>1-3                    | 1-3<br>1-2                         |  | 6000<br>6000   |

<sup>1</sup>\_/ ADAPTABILITY - 0=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=600D; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

<sup>2 /</sup> SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

<sup>3</sup>\_/GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

<sup>4 /</sup> STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

<sup>5 /</sup> FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K: 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K: 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K: THE FIRST CATAGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATAGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMENDATIONS SHOULD ALMAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

<sup>6</sup>\_/ Ph RANGE - LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

(Loamy)

Description: Deep, well drained or moderately well drained soils with

loamy surfaces and loamy or clayey subsoils. Soils in this subgroup occur on uplands and receive little or no extra moisture from adjoining areas. (Soils with a clayey subsoil

have at least 14 inches of loamy material above the

subsoil.)

Limitations: Few or no limitations. Soils in this subgroup can have

slight wetness and slight salinity or alkalinity.

Soils: Farnum loam, sandy loam, complex

Ost clay loam

Shellabarger fine sandy loam

LRA: 79 SUITABILITY GROUP: A-2

-5-

| SPECIES   |   | CIES<br>ILITY 1 /<br>IRRIGATED       | SPECIES<br>PRODUC-<br>TIVITY<br>2_/        | GRAZING<br>PREFERENCE<br>3_/                   | STAND<br>ESTABLISH-<br>MENT 4_/               |                                 | TILIZ<br>EDS 5<br>P |                    | Ph RANGE<br>6_/                                     | DROUGHT<br>TOLERANCE   |
|---|---|--------------------------------------|--|--|---|---------------------------------|---------------------|--------------------|---|--|
| WARM SEASON GRASSES BIG BLUESTEN KAN ERSTERN GRMAGRASS INDIANGRASS CHEYENNE CSAGE SIDEOATS GRAMA EL REND SNITCHGRASS RLOCKNEL | 6636658866                                | 8<br>8<br>7<br>7<br>7<br>7<br>7      | 5<br>6<br>10<br>5<br>6<br>3<br>4<br>5<br>6 | 7<br>7<br>7<br>7<br>7<br>7<br>7<br>5<br>5<br>5 | 2-3<br>2-4<br>1-3<br>1-3<br>1-3<br>1-3<br>1-3 | 0-1<br>0-3<br>0-1<br>0-1<br>0-2 | 0<br>0<br>0-5<br>0  | 0<br>0-1<br>0<br>0 | 6.0-7.5<br>5.5-7.5<br>5.5-7.5<br>6.0-7.5<br>5.5-8.0 | FAIR-GOOD<br>FAIR-GOOD<br>FAIR<br>FAIR<br>FAIR<br>FAIR<br>GOOD<br>GOOD |
| COOL SEASON BRASSES RSED CANARYBRASS IOREED RISE SYLOTH BRONEGRASS ACHENBACH LINCOLN SOUTHLAND TALL FESCLE KENTUCKY 31        | 6<br>0<br>0<br>0<br>4<br>4<br>4<br>0<br>0 | 5<br>5<br>5<br>7<br>7<br>7<br>7<br>8 | 7<br>8<br>8<br>6<br>7<br>7<br>7<br>6<br>7  | 5<br>6<br>6<br>7<br>7<br>7<br>7<br>7           | 1-2<br>1-2<br>1-2<br>1-2<br>1                 | , -                             | 1-2                 | 0–2                | 5.5-7.0<br>5.5-7.0<br>6.2-7.0                       | POOR<br>POOR<br>POOR<br>POOR<br>FAIR<br>FAIR<br>FAIR<br>POOR<br>POOR   |
| WHEATERASS INTERMEDIATE SLATE TALL JOSE WESTERN BARTON  | 5<br>5<br>5<br>5<br>6                     | 7<br>7<br>7<br>7<br>8<br>8           | 5<br>6<br>5<br>6<br>4<br>5                 | 4<br>4<br>4<br>5<br>5                          | 1-2<br>1-2<br>1-2<br>1-2<br>1-3<br>1-3        | 1-2<br>1-2<br>0-1               | 1-2                 | 0-1<br>0-1<br>0-1  |   | FAIR<br>FAIR<br>FAIR<br>SOOD<br>BOOD                                   |
| LEGUMES<br>ALFALFA (STANDARO)<br>(RHIZOMATOUS)  | 4 3                                       | 8 7                                  | 10<br>7                                    | <b>8</b><br>8                                  | 1-2   | 6-1<br>0-1                      | 1-3<br>1-3          | 1-3<br>1-2         | 6.5-8.0<br>6.5-8.0                                  | 600D<br>600D   |

<sup>1</sup>\_/ ADAPTABILITY - O=NOT ADAPTED, 1-3=POOR, 4-6=FAIR. 7-9=GOOD; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS; S=ADAPTED IN SOUTHERN COUNTIES ONLY.

<sup>2./</sup> SPECIES PRODUCTIVITY - A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.

<sup>3</sup>\_/GRAZING PREFERENCE - SCALE 1 - 8, (1=POOR, 8=EXCELLENT).

<sup>4 /</sup> STAND ESTABLISHMENT - NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.

<sup>5</sup>\_/ FERTILIZER NEEDS - 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.

<sup>6 /</sup> Ph RANGE - LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

### (Coarse Loamy Bottomlands)

Description: Deep, well drained or moderately well drained soils with

loamy surfaces and subsoils. Soils in this subgroup have moderately coarse-textured surfaces, occur on lowlands, and

may receive extra moisture from adjoining areas.

Limitations: Lack of moisture and soil blowing may be hazards during

establishment of pasture.

Soils: Canadian sandy loam, fine sandy loam

| SPECIES   | ADAPTAB          | CIES<br>ILITY 1 /<br>IRRIGATED | SPECIES<br>PRODUC-<br>TIVITY<br>2_/ | GARZING<br>PREFERENCE<br>3_/ | STAND<br>ESTABLISH-<br>MENT 4_/ | FER<br>NE<br>N   | TILIZ<br>EDS 5 | ER<br>. /<br>. K | Ph RANGE<br>6_/    | DROUGHT<br>TOLERANCE                   |
|---|------------------|--------------------------------|-------------------------------------|------------------------------|---------------------------------|------------------|----------------|------------------|--------------------|--|
| WARE SEASON GRASSES BERMUDAGRASS HARDIE MIDLAND                     | 5 5 5            | 8<br>8<br>8                    | 9                                   | 5<br>4<br>5<br>7             | 2-3<br>2-3<br>2-3               | 1-3<br>0-1       | 0-5            | 1-2              | 5.5-8.0            | FAIR<br>FAIR<br>FAIR<br>FAIR-GOOD      |
| BIG BLUESTEM<br>KAW<br>EASTERN GAMAGRASS<br>INDIANGRASS<br>CHEYENNE | 7<br>6<br>7<br>7 | 8<br>9<br>8                    | 5<br>6<br>10<br>5<br>6              | 7<br>8<br>7<br>7             | 2-3<br>2-3<br>2-4<br>1-3<br>1-3 | 0-3<br>0-1       | 0-5            | 0-1<br>0         | 5.5-7.5<br>5.5-7.5 | FAIR-GOOD<br>FAIR<br>FAIR<br>FAIR      |
| USAGE<br>SAND BLUESTEM<br>WDODWARD<br>SWITCHORASS                   | 6<br>7<br>7<br>7 | 8<br>8<br>8                    | 6<br>5<br>6<br>5                    | 7<br>7<br>7<br>5<br>5        | 1-3<br>1-3<br>1-3<br>1-2<br>1-2 | 0-1<br>0-2       | 0-1<br>0       | 0-1<br>0         | 5.5-7.5<br>5.5-8.0 | FAIR<br>FAIR-GOOD<br>FAIR-GOOD<br>GOOD |
| BLACKWELL<br>COOL SEASON BRASSES<br>DRCHARDBRASS<br>LATAR           | 0                | 7 7                            | 6<br>7                              | 7 7                          | 1-2<br>1-2                      | ·-5              | -5             |                  | 5.5-7.0            | POOR<br>POOR                           |
| REED CAMARYGRASS IGREED RISE SMOOTH BROMEGRASS ACHENBACH            | 3<br>2<br>5<br>5 | 6<br>5<br>8                    | 7<br>8<br>8<br>6<br>7               | 6<br>6<br>7<br>7             | 1-2<br>1-2<br>1-2<br>1          | . <del>-</del> 2 | , –            | -                | 5.5-7.0<br>5.5-7.0 | POOR<br>POOR<br>POOR<br>FAIR<br>EAIR   |
| LINCOLN<br>SOUTHLAND<br>TALL FESCUE<br>KENTUCKY 31                  | 4<br>5<br>4<br>4 | 7<br>8<br>8                    | 7<br>7<br>6<br>7                    | 7<br>7<br>4<br>4             | i<br>i<br>i<br>1                | ;-2              | ,-2            | 0-2              | 6.2-7.0            | FAIR<br>FAIR<br>POOR<br>POOR           |
| WHEATGRASS INTERMEDIATE SLATE TALL JOSE                             | 6<br>6<br>6      | 7<br>7<br>8<br>8               | 5<br>5<br>6<br>4                    | 4                            | 1-2<br>1-2<br>1-2<br>1-2        | 1-2<br>1-2       | 1-2<br>1-2     | 0-1<br>0-1       |                    | FAIR<br>FAIR<br>FAIR<br>FAIR           |
| WESTERN<br>BARTON<br>LEGUMES  | 7                | <b>8</b><br>8                  | 5                                   | 5                            | 1-3<br>1-3                      | 0-1              | 0-1            | 0-1              | 6.5-8.5            | 600D<br>600D                           |
| ALFALFA (STANDARD)<br>(RHIZDMATOUS)                                 | 6<br>5           | 9<br>8                         | 10<br>7                             | 8                            | 1-2                             | 0-1<br>0-1       | 1-3<br>1-3     | 1-5              |                    | 600D<br>600D                           |

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- 3 /GRAZING PREFERENCE SCALE 1 8, (1=POOR, 8=EXCELLENT).
- 4 / STAND ESTABLISHMENT NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.
- 5 / FERTILIZER NEEDS 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF R, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF N, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ PO
- 6 / Ph RANGE LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

(Sands)

Deep, well drained to excessively drained soils with sandy Description:

surfaces and subsoils. Available water holding capacity in

the 40-inch root zone is less than four inches.

Choice of plants is limited by droughtiness and low Limitations:

fertility. Lack of moisture and soil blowing may be a

hazard during establishment of recommended species.

Pratt loamy fine sand, fine sand, complex Soils:

Tivoli loamy fine sand, fine sand, soils, complex 1/

Suitable only when irrigated 1/

LRA: 79 SUITABILITY GROUP: A-4

-5-

| SPECIES   | • • •            | CIES<br>ILITY 1 /<br>IRRIGATED | SPECIES<br>PRODUC-<br>TIVITY<br>2_/ | GRAZING<br>PREFERENCE<br>3_/ | STAND<br>ESTABLISH-<br>MENT 4_/ |                   | TILIZ<br>EDS 5<br>P |            | Ph <b>RANGE</b><br>6_/        | DROUGHT<br>TOLERANCE                           |
|---|------------------|--------------------------------|-------------------------------------|------------------------------|---------------------------------|-------------------|---------------------|------------|-------------------------------|--|
| WARN SEASON BRASSES BERNLIDAGARASS HARDIE MIDLAND BIG BLUESTEN KAW  | 4<br>4<br>5<br>5 | 7<br>7<br>7<br>7               | 9<br>9<br>5<br>5                    | 5<br>4<br>5<br>7<br>7        | 2-3<br>2-3<br>2-3<br>2-3<br>2-3 | 1-3<br>0-1        | 0-5                 | 0          | 5.5-8.0<br>6.0-7.5            | FAIR<br>FAIR<br>FAIR<br>FAIR-GOOD<br>FAIR-GOOD |
| ERSTERN SAMAGRASS INDIANGRASS CHEYENNE PRAIRIE SANDREED GUSHEN      | 35577            | 8<br>7<br>7<br>8<br>8          | 10<br>5<br>6<br>5<br>6              | 6<br>7<br>7<br>3<br>3        | 2-4<br>1-3<br>1-3<br>2-3<br>2-3 | 0-3<br>0-1<br>0-1 | 0-2<br>0<br>0-1     | 0-1<br>0-1 | 5.5-7.5<br>5.5-7.5<br>5.5-7.0 | FAIR<br>FAIR<br>FAIR<br>600D<br>600D           |
| Sand Bluestem<br>Moddmard<br>Sidedats Grama<br>El Reno              | 7<br>7<br>6<br>6 | 8<br>8<br>7<br>7               | 6<br>3<br>4                         | 37<br>7<br>5<br>5<br>5       | 1-3<br>1-3<br>1-3<br>1-3        | 0-1<br>0-1        | 0-1                 | 0-1        | 5.5-7.5<br>6.0-7.5            | FAIR-600D<br>FAIR-600D<br>600D<br>600D<br>600D |
| SWITCHGRASS BLACKWELL  COGL SEASON GRASSES CREEPING FOXTAIL         | 6<br>6           | 7<br>7<br>5<br>5               | 5<br>6<br><u>6</u>                  | 5<br>7<br>7                  | 1-2<br>1-2<br>1-2               | -5                | 0                   | 0-5        | 5.5-8.0<br>5.5-7.0            | 600D<br>600D<br>900R<br>900R                   |
| GARRISON<br>ORCHARDGRASS<br>LATAR<br>SMOOTH BROMEGRASS<br>ACHENBACH | 0<br>0<br>4<br>4 | 7<br>7<br>7                    | 7<br>6<br>7<br>6<br>7               | 7<br>7<br>7<br>7             | 1-2                             | 1-5               |                     |            | 5.5-7.0<br>5.5-7.0            | POOR<br>POOR<br>FAIR<br>FAIR                   |
| LINCOLN<br>SOUTHLAND<br>TALL FESCUE<br>KENTUCKY 31<br>WEATGRASS     | <b>4</b><br>0    | 7<br>7<br>7                    | 7<br>7<br>6<br>7                    | 7<br>7<br>4<br>4             | į                               | 1-2               |                     |            | 6.2-7.0                       | FAIR<br>FAIR<br>POOR<br>POOR                   |
| INTERNEDIATE SLATE LEGUMES ALFALFA (STANDARD)                       | 0<br>0<br>3      | 7<br>7<br>8                    | 5<br>6<br>10                        | <b>4</b><br><b>4</b><br>8    | 1-2<br>1-2                      | j-2<br>b-1        | 1-2                 | 0-1        | 6.0-7.5<br>6.5-8.0            | FAIR<br>FAIR<br>GOOD                           |
| (SHIZOMATOUS)   | ş                | 7                              | ň                                   | å                            | 1-2                             | 0-i               | 1-3                 | 1-2        | 6.5-B.0                       | 600D   |

- i\_/ ADAPTABILITY O=NOT ADAPTED, 1-3=PODR, 4-6=FAIR, 7-9=6000; N=NORTH OF THE SMOKY HILL AND KANSAS RIVERS: S=ADAPTED IN SOUTHERN COUNTIES ONLY.
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- 5\_/ FERTILIZER NEEDS 0=NONE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEBORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEBORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALMAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.
- 6 / Ph RANGE LON AND HIGH Ph RECOMMENDED FOR THE SPECIES.

# (Coarse Loamy Upland)

Deep, well drained soils with loamy surfaces and subsoils Soils in this subgroup have moderately coarse-textured surfaces and occur on uplands. Description:

Lack of moisture and soil blowing may be hazards during Limitations:

establishment of recommended species.

Albion sandy loam Soils:

Attica sandy loam, fine sandy loam, loamy fine sand, complex Naron loam, fine sandy loam, complex

LRA: 79 SUITABILITY GROUP: A-6 -2-

| SPECIES  |                                 | CIES<br>ILITY 1 /<br>IRRIGATED       | SPECIES PRODUC- TIVITY 2_/           | GRAZING<br>PREFERENCE<br>3_/     | STAND<br>ESTABLISH-<br>MENT 4_/               |                            | TILIZ<br>EDS 5<br>P |                   | Ph RANGE<br>6_/                          | DROUGHT<br>TOLERANCE   |
|--|---------------------------------|--------------------------------------|--------------------------------------|----------------------------------|---|----------------------------|---------------------|-------------------|--|--|
| WARM SEASON GRASSES BERNUDAGRASS HARDIE MIDLAND BIG BLUESTEN KAW EASTERN GAMAGRASS INDIANGRASS CHEYENNE                | 2226636656                      | 7<br>7<br>7<br>8<br>8<br>8<br>8<br>8 | 9<br>9<br>5<br>6<br>10               | 5<br>4<br>5<br>7<br>7<br>8<br>7  | 2-3<br>2-3<br>2-3<br>2-3<br>2-3<br>2-4<br>1-3 | 1-3<br>0-1<br>0-3<br>0-1   | 0 0-5               | 0<br>0-1<br>0     | 5.5-8.0<br>6.0-7.5<br>5.5-7.5<br>5.5-7.5 | FAIR<br>FAIR<br>FAIR<br>FAIR-GOOD<br>FAIR-GOOD<br>FAIR<br>FAIR<br>FAIR |
| GSAGE SAND BLUESTEM MOODWARD SIDEOATS GRAMA EL REND SWITCHGRASS BLACKWELL  | 5<br>6<br>8<br>8<br>6           | 7<br>8<br>8<br>7<br>7<br>7           | 566563456                            | .7<br>7<br>7<br>5<br>5<br>5<br>5 | i-3<br>i-3<br>i-3<br>i-3<br>i-3<br>i-2<br>i-2 | 0-1<br>0-1<br>0-2          | 0-1<br>0<br>0       | 0-1<br>0<br>0     | 5.5-7.5<br>6.0-7.5<br>5.5-8.0            | FAIR<br>FAIR-GOOD<br>FAIR-GOOD<br>6000<br>6000<br>6000<br>5000         |
| COOL SEASON GRASSES RSED CANARYGRASS TOREED RISE SMOOTH BROMEGRASS ACHENBACH LINCOLN SOUTHLAND TALL FESCUE KENTUCKY 31 | 0<br>0<br>4<br>4<br>4<br>4<br>0 | 5558888888                           | 7<br>8<br>8<br>6<br>7<br>7<br>7<br>6 | 6<br>6<br>7<br>7<br>7<br>7<br>7  | 1-2<br>1-2<br>1-2                             | 1-5                        |                     | 0-5               | 5.5-7.0<br>5.5-7.0<br>6.2-7.0            | POOR<br>POOR<br>POOR<br>FAIR<br>FAIR<br>FAIR<br>POOR<br>POOR           |
| WHEATGRASS INTERMEDIATE SLATE TALL JOSE WESTERN BARTON   | 5<br>5<br>5<br>6<br>6           | 7<br>7<br>7<br>8<br>8                | 5<br>6<br>5<br>6<br>4<br>5           | 4<br>4<br>4<br>5<br>5            | 1-2<br>1-2<br>1-2<br>1-3<br>1-3               | 1-2                        | 1-2<br>1-2<br>0-1   | 0-1<br>0-1<br>0-1 | 6.0-7.5<br>7.0-8.5<br>6.5-8.5            | FAIR<br>FAIR<br>FAIR<br>FAIR<br>GOOD<br>GOOD                           |
| LEGUMES<br>ALFALFA (STANDARD)<br>(RHIZOMATDUS)   | <b>4</b><br>3                   | 8<br>7                               | 10<br>7                              | 8<br>8                           | 1-2   | <b>0</b> −1<br><b>0</b> −1 | 1-3<br>1-3          | 1-3<br>1-2        | 6.5-8.0<br>6.5-8.0                       | 600 <b>0</b><br>600 <b>0</b>   |

- 1 / ADAPTABILITY O=NOT ADAPTED, 1-3=POOR, 4-6=FAIR, 7-9=600D; N=NORT# OF THE SMOKY HILL AND KANSAS RIVERS: S=ADAPTED IN SOUTHERN COUNTIES ONLY.
- 2 / SPECIES PRODUCTIVITY A POTENTIAL ANIMAL UNIT MONTH RATING FOR EACH CULTIVAR. THIS AUM FACTOR, FOR THE SPECIES, TIMES THE ADAPTABILITY FACTOR, DIVIDED BY 9, SHOULD GIVE A POTENTIAL AUM PRODUCTIVITY RATING OF THIS SPECIES OR CULTIVAR ON THIS GROUP.
- 3 /GRAZING PREFERENCE SCALE 1 8, (1=POOR, 8=EXCELLENT).
- 4 / STAND ESTABLISHMENT NUMBERS = APPROXIMATE YEARS FOR ESTABLISHMENT.
- 5\_/ FERTILIZER NEEDS 0=NONE; 1=10-50 PDUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FRYDRABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.
- 6 / Ph RANGE LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

(Deep Limy)

Deep, well drained or somewhat excessively drained soils with loamy surfaces and subsoils that contain lime throughout the profile. Description:

Limitations: Soils in this subgroup are slightly affected by limy

surfaces and subsoils.

Clark loam, clay loam, complex Soils:

LRA: 79 SUITREILITY BROUP: A-7

| SPECIES  | SPEC<br>ADAPTABI<br>DRYLAND |                          | SPECIES<br>PRODUC-<br>TIVITY<br>2_/ | GRAZING<br>PREFERENCE<br>3_/    | STAND<br>ESTABLISH-<br>MENT 4_/        |                   | TILIZ<br>EDS 5<br>p |       | Ph RANGE<br>6_/                              | DROUGHT<br>TOLERANCE   |
|--|-----------------------------|--------------------------|-------------------------------------|---------------------------------|--|-------------------|---------------------|-------|--|--|
| MARM SEASON GRASSES BIG BLUESTEM KAN INDIANSRASS CHEYENNE SIDEOATS GRAMA EL RENO SHITCHGRASS BLACKMELL | 66558855                    | 8<br>9<br>77<br>77<br>77 | 56563456                            | 7<br>7<br>7<br>7<br>5<br>5<br>5 | 2-3<br>2-3<br>1-3<br>1-3<br>1-3<br>1-2 | 0-1<br>0-1<br>0-2 | 0<br>0<br>•         | 0 0 0 | 6.0-7.5<br>5.5-7.5<br>6.0-7.5<br>5.5-8.0     | FAIR-GOOD<br>FAIR-GOOD<br>FAIR<br>FAIR<br>GOOD<br>GOOD<br>GOOD<br>GOOD |
| COOL SEASON GRASSES SMOOTH BRONESRASS ACHENBACH EINCOLN SOUTHLAND TREE FESCUE RENTUCKY 31              | 3<br>3<br>3<br>0            | 6666555                  | 6<br>7<br>7<br>7<br>6               | 7<br>7<br>7<br>7<br>4           | 1 1 1 1 1 1 1 1 1                      |                   |                     |       | 5.5-7.0<br>6.2-7.0                           | FAIR<br>FAIR<br>FAIR<br>FAIR<br>POOR<br>POOR                           |
| WHEATGRASS INTERNEDIATE SLATE TALL JOSE WESTERN BARTON   | 4<br>5<br>5<br>6<br>6       | 6<br>7<br>7<br>8<br>8    | 5<br>6<br>5<br>6<br>4<br>5          | 4<br>4<br>4<br>5<br>5           | 1-2<br>1-2<br>1-2<br>1-2<br>1-3<br>1-3 |                   | 1-2<br>1-2<br>0-1   | 0-    | 6.0-7.5<br>7.0-8.5<br>6.5-6.5                | FAIR<br>FAIR<br>FAIR<br>FAIR<br>GOOD<br>SOOD                           |
| LEGUMES<br>ALFALFA (STANDARD)<br>(RHIZOMATOUS)   | 5                           | 7<br>6                   | 10<br>7                             | 8<br>8                          | 1<br>1-2                               | 0-1<br>0-1        | 1-3<br>1-3          | 1-3   | 6.5 <del>-8</del> .0<br>6.5 <del>-8</del> .0 | 600D   |

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- 5\_/ FERTILIZER NEEDS -- O=NONE: 1=10-50 POUNDS OF N. 20-40 POUNDS OF P. 20-40 POUNDS OF K: 2=50-100 POUNDS OF N. 40-60 POUNDS OF P. 40-70 POUNDS OF K: 3=100+ POUNDS OF N. 60+ POUNDS OF P. 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A HEALTHY STAND. THE SECOND CATEGORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALMAYS BE USED ON IRRIGATED PASTURES AND OTHER INTENSIVELY MAMAGED PASTURES.
- 6 / P) RANGE LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

### (Sandy Bottomland)

Deep, well drained or excessively drained soils with sandy Description:

surfaces and subsoils. Soils in this subgroup have sandy surfaces and occur on bottomlands and receive extra water

from upland drainage.

Limitations:

Choice of plants is limited by droughtiness and low fertility. Soil blowing may be extremely hazardous during

establishment and early growth.

Soils: Croft soils

Las Animas loamy fine sand

고장: 19 5577 - 17 3968위: A-9

|   | SPEE<br>ADAPTAB | CIES                  | SPECIES<br>PRODUC-<br>TIVITY | GRAZING      | STAND                           |             | RTILIZ       |            | 5- 5005            | 8.0360.00                                 |
|---|-----------------|-----------------------|------------------------------|--------------|---------------------------------|-------------|--------------|------------|--------------------|---|
| 6210248   | DRYLAND         | IRRIGATED             | 5/                           | 3_/          | ESTABLISH-<br>MENT 4_/          | NE<br>N     | EDS 5        | _ K        | Ph RANGE<br>6_/    | DROUGHT<br>TOLERANCE                      |
| #97# SEGSON GRASSES<br>BE7#±1/AGRASS<br>HARDIE<br>#15_AND | <b>4</b>        | 7 7 7                 | 9<br>9<br>9                  | 5<br>4<br>5  | 2-3<br>2-3<br>2-3               | 1+3         | 0-5          | 1-2        | 5. <b>5-8.</b> 0   | FAIR<br>FAIR<br>FAIR                      |
| BIS REVESTER  | ģ               | Ž                     | 5                            | Ž            | 2-3                             | 0-1         | 0            | 0          | 6.0-7.5            | FAIR-600D                                 |
| EASTEÝN SAMAGRASS<br>INDIANGRASS<br>DHEYENNE<br>ESAGE     | 665             | 7<br>8<br>7<br>7<br>6 | 6<br>10<br>5<br>6            | 7<br>7<br>7  | 2-3<br>2-4<br>1-3<br>1-3<br>1-3 | 0-3<br>0-1  | 0-2          | 0-1<br>0   | 5.5-7.5<br>5.5-7.5 | FAIR-GOOD<br>FAIR<br>FAIR<br>FAIR<br>FAIR |
| PRAIRIE SANDREED<br>SOSHEN                                | 7               | 8<br>8                | Ş                            | 3            | 2-3                             | 0-1         | 0-1          | 0-1        | 5.5-7.0            | GOOD                                      |
| SAND BLUESTEM<br>WOODWARD                                 | າ<br>7          | 8                     | 5                            | <del>3</del> | 2-3<br>1-3                      | 0-1         | 0-1          | 0-1        | 5.5-7.5            | 8000<br>FAIR-6000                         |
| Sir ITCHGRASS<br>BLACKIEL                                 | 6               | 7<br>7                | 6565656                      | 5<br>5       | 1-3<br>1-2<br>1-2               | 0-2         | 0            | 0          | 5.5-6.0            | F91R <b>-6000</b><br>6000<br>6000         |
| COUL SEASON GRASSES<br>CRCHARDGRASS                       | 0               | 7                     | 6                            | 7            | 1-2                             | 1+2         | 1-2          | 0-5        | 5.5-7.0            | 900R                                      |
| LATAR<br>REED CANARYGRASS                                 | Ŏ               | Ż                     | 7                            | Ź            | 1-2<br>1-2                      | 1-5         |              |            | 5.5-7.0            | POOR<br>POOR                              |
| IOREED<br>RISE  | ŏ               | 6<br>5<br>7           | á<br>8                       | 6            | 1-2                             | *LE         | 1-5          | VÆ         | 3.3-1.0            | POOR                                      |
| SHOOTH BROKEGRASS ACHENBACH LINCOLN                       | <b>4</b>        | 7<br>7<br>7           | 6<br>7<br>7                  | 7<br>7       | 1-2                             | -5          | / <b>-</b> S | 0-5        | 5.5-7.0            | POOR<br>FAIR<br>FAIR<br>FAIR              |
| SOUTHILAND<br>TALL FESCUE<br>KENTUCKY 31                  | 0               | 7<br>7<br>7           | 7<br>6<br>7                  | 7            |                                 | 1-5         | 1-2          | 0-5        | 6.2-7.0            | FAIR<br>POOR<br>POOR                      |
| INTERNED LATE   | ٥               | 7                     | 5                            | 4            | 1-2                             | 1-2         | 1-2          | 0-1        | 5.0-7.5            | FAIR                                      |
| SLATE<br>NESTERN  | Ó               | Ž                     | 6                            | į            | 1-2                             |             |              |            |                    | FAIR                                      |
| BARTON  | 5<br>5          | 7                     | 4<br>5                       | 5<br>5       | 1 <b>-3</b><br>1-3              | <b>Q</b> -1 | 0-1          | 0-1        | 6.5-8.5            | 900D                                      |
| LEGUNES   |                 | _                     | - 4                          | _            |                                 |             | _            |            |                    |   |
| ALFALFA (STANDARD)<br>(RHIZOMATOUS)                       | 3               | 8<br>7                | 10<br>7                      | 8            | 1-2                             | 0-1<br>0-1  | 1-3<br>1-3   | ;-3<br>;-2 | 6.5-8.0<br>6.5-8.0 | 600D                                      |

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  POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS
  OF P, 70+ POUNDS OF K. THE FIRST CATEGORY IS WHAT IS NEEDED TO MAINTAIN A
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  FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED
  ON TARIGATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.
- 6 / Ph RANGE LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

SECTION II-K TO NOTICE KS-147, 4/87

## (Wet Loamy)

Description:

Deep, somewhat poorly or poorly drained soils with loamy surfaces and loamy to clayey subsoils. Soils in this subgroup occur on floodplains and terraces which receive

extra moisture from adjoining areas.

Seasonal wetness during a portion of the growing season. Limitations:

Lesho clay loam Soils:

Waldeck fine sandy loam Wann fine sandy loam Zenda loam, clay loam

| SPECIE:   | SPECIE<br>ADAPTABILI<br>DRYLAND IR | SPECIES PRODUCTIVITY 2/                  | GRAZING<br>PREFERENCE<br>3_/                   | STAND<br>ESTABLISH-<br>MENT 4_/                             |                                 | TILIZE<br>EDS 5<br>p |                    | Ph RANGE<br>6_/                                     | DROUGHT<br>TOLERANCE   |
|---|------------------------------------|--|--|---|---------------------------------|----------------------|--------------------|---|--|
| WARM SEASON SEASSES SERMUDAGRASS HARDIE MIDLAND BIG BLUESTEM KAW ERSTERN SAMAGRASS INDIANGRASS CHEYENNE SWITCHGRASS BLACKWELL | 5554484477                         | 9995605656                               | 5<br>4<br>5<br>7<br>7<br>8<br>7<br>7<br>5<br>5 | 2-3<br>2-3<br>2-3<br>2-3<br>2-3<br>2-4<br>1-3<br>1-2<br>1-2 | 1-3<br>0-1<br>0-3<br>0-1<br>0-2 | 0                    | 0<br>0-1<br>0<br>0 | 5.5-8.0<br>6.0-7.5<br>5.5-7.5<br>5.5-7.5<br>5.5-8.0 | FAIR<br>FAIR<br>FAIR<br>FAIR-GOOD<br>FAIR-BOOD<br>FAIR<br>FAIR<br>GOOD<br>GOOD |
| COOL SEASON GRASSES LREEPING FOXTAIL GARRISON ORCHARDGRASS LATAR REED CANAFYGRASS I DREED RISE TALL FESCUE KENTUCKY 31        | 665566644                          | <br>5<br>7<br>6<br>7<br>8<br>8<br>6<br>7 | 7<br>7<br>7<br>7<br>6<br>6<br>6<br>4           | 1-2<br>1-2<br>1-2<br>1-2<br>1-2<br>1-2<br>1-2               | 1-5<br>1-5<br>1-5               | 1-2                  | 0-5<br>0-5         | 5.5-7.0<br>5.5-7.0<br>5.5-7.0<br>6.2-7.0            | PEOR<br>POOR<br>POOR<br>POOR<br>POOR<br>POOR<br>POOR<br>POOR                   |
| MHEATERASS INTERMEDIATE SLATE TALL JOSE MESTERN BARTON  | 6<br>8<br>8<br>8                   | 5<br>6<br>5<br>6<br>4<br>5               | 4<br>4<br>4<br>5<br>5                          | !-2<br>!-2<br>!-2<br>!-3<br>!-3                             | 1-5<br>1-5                      | 1-2<br>1-2<br>0-1    | 0-1                | 7.0-8.5   | FAIR<br>FAIR<br>FAIR<br>FAIR<br>GOOD<br>GOOD                                   |

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- 6 / Ph RANGE LOW AND FIGH Ph RECOMMENDED FOR THE SPECIES.

### (Subirrigated)

Description: Deep, somewhat poorly drained and poorly drained soils with

loamy surfaces and subsoils. Surface and subsoil textures range from loamy sands to silty clay loams. A permanent water table is normally present from one to five feet below

the surface.

Limitations: Soil saturation within the root zone restricts species

selection. Wetness during the optimum seeding periods can

hinder establishment. Water is at or near the surface

during the winter and spring.

Soils: Dillwyn loamy fine sand, complex

Kanza complex

Kingman silty clay loam Platte soils, complex

Plevna fine sandy loam, soils, complex

Wet alluvial land

| SPECIES  | ADAPTAB               | ECIES<br>NLITY 1 /<br>IRIBATED | SPECIES<br>PRODUC-<br>TIVITY<br>2/ | GRAZING<br>PREFERENCE<br>3_/              | STAND<br>ESTABLISH-                    |                   | ILIZ<br>DŞ 5  |               | Ph RAMBE<br>6_/                          | DAGUSHT<br>TGLERAGE  |
|--|-----------------------|--------------------------------|------------------------------------|---|--|-------------------|---------------|---------------|--|--|
| -Alm Carrer Dangers  |                       |                                | ~.·                                | <b>-</b>                                  |  | .*1               |               |               | u_/                                      | . JESARRES   |
| *ARY SEASON BRASSES BIG BLUESTEM KAN EASTERN SAMAGRASS INDIANGRASS ONEYENNE  | 8<br>8<br>9<br>7<br>7 |                                | 5<br>10<br>5<br>6                  | 7<br>7<br>8<br>7<br>7                     | 2-3<br>2-3<br>2-4<br>1-3<br>1-3        | 0-1<br>0-3<br>0-1 | 0<br>0-2<br>0 | 0<br>0-1<br>0 | 6.0-7.5<br>5.5-7.5<br>5.5-7.5            | FAIR-BOOD<br>FAIR-BOOD<br>FAIR<br>FAIR<br>FAIR               |
| osabe<br>Smiltohgapas<br>Blackhell<br>Karlon   | 5<br>8<br>8<br>7      |                                | 6<br>6<br>8                        | 7<br>5<br>4                               | 1-3<br>1-2<br>1-2<br>1-2               | 0-2               | ę.            | e             | 5.5- <b>8.</b> 0                         | FAIR<br>600D<br>60CD<br>900R                                 |
| DOEL SEASON GRASSES DREEPING FOXTAIL GRARISON GROCHARDBRASS LATAR REED CAMARYGRASS IOREED RISE TALL FESONE KENTUCKY 31 | 4444455               | -                              | 67<br>67<br>7<br>7<br>8<br>8<br>6  | 7<br>7<br>7<br>7<br>6<br>6<br>6<br>4<br>4 | 1-2<br>1-2<br>1-2<br>1-2<br>1-2<br>1-2 | 1-2               | 1-2<br>1-2    | 0-2<br>0-2    | 5.5-7.0<br>5.5-7.0<br>5.5-7.0<br>6.2-7.0 | PEOR<br>POOR<br>PEOR<br>POOR<br>POOR<br>POOR<br>POOR<br>POOR |
| MEATERASS TA JOSE WESTERN BARTON   | 8<br>8<br>8           |                                | 5<br>6<br>4<br>5                   | •<br>•<br>5<br>5                          | 1-2<br>1-2<br>1-3<br>1-3               |                   |               | 0-1<br>0-1    | 7.0-8.5<br>6.5-8.5                       | FAIR<br>FAIR<br>GOOD<br>GOOD                                 |

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- 3\_/GRAZING PREFERENCE SCALE 1 8, (1=POOR, 8=EXCELLENT).
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- 5\_/ FERTILIZER NEEDS O=NORE; 1=10-50 POUNDS OF N, 20-40 POUNDS OF P, 20-40 POUNDS OF K; 2=50-100 POUNDS OF N, 40-60 POUNDS OF P, 40-70 POUNDS OF K; 3=100+ POUNDS OF N, 60+ POUNDS OF P, 70+ POUNDS OF K. THE FIRST CATEBORY IS WHAT IS NEEDED TO MAINTAIN A HERLTHY STAND. THE SECOND CATEBORY IS THE HIGHEST AMOUNT EXPECTED TO GIVE A FAVORABLE RESPONSE ON DRYLAND. SOIL TEST RECOMMENDATIONS SHOULD ALWAYS BE USED ON IRRIBATED PASTURES AND OTHER INTENSIVELY MANAGED PASTURES.
- 6 / Ph. RANGE LOW AND HIGH Ph. RECOMMENDED FOR THE SPECIES.

## (Sandy Depression)

Description:

Deep, somewhat poorly drained, and slowly permeable soils with loamy surfaces and clayey subsoils. Surface textures range from loamy fine sands to clay loams. Subsoils range from sandy clay loam to clays. Surface wetness or a seasonal water table is at or near the surface during the months of

October through April.

Wetness during the dormant season, poor drainage, and slow Limitations:

permeability restricts the species adapted to this subgroup.

Temporary ponding and wet soils may hinder seedbed

preparation and establishment.

Carwile fine sandy loam, soils, complex Soils:

URG: 79 SUITPBILITY BROWP: C-4

| * <b>\$9<b>\$</b>036<b>5</b></b>             |                  | DIES<br>ILITY 1/<br>IRRIGATED | SPECIES<br>PRODUC-<br>TIVITY<br>2/ | GRAZING<br>PREFERENCE<br>3_/ | STAND<br>ESTABLISH-<br>MENT 4_/ |            | TILIZ<br>EDS 5 |          | Ph RANGE<br>6_/      | DROUGHT<br>TGLERANCE   |
|--|------------------|-------------------------------|------------------------------------|------------------------------|---------------------------------|------------|----------------|----------|----------------------|------------------------|
| WARM SEASON GRASSES<br>BERMUDAGRASS          | 5                | 0                             | 9                                  | 5                            | 2-3                             | 1-3        | 0-5            | 1-2      | 5.5 <del>-8</del> .0 | FAIR                   |
| HARDIE<br>MIDLAND                            | 5<br>5           | 0                             | 9<br>5<br>6                        | - <del>1</del><br>5          | 2-3<br>2-3<br>2-3<br>2-3        | 0-1        | 0              | õ        | 6.0-7.5              | FAIR<br>FAIR-SOOD      |
| BIG BLUESTEM<br>Kan                          | 5<br>5           | Ö                             | 5<br>6                             | 7                            | £-3<br>2-3                      | 4-1        | U              | V        | 5.0-7.3              | FAIR-GOOD              |
| EASTERN SAMAGRASS<br>INDIANGRASS<br>CHEVENNE | 555555555555     | 6                             | 10<br>5                            | .6<br>7                      | 2-4<br>1-3<br>1-3               | 0-3        | 0-5            | 0-1<br>0 | 5.5-7.5<br>5.5-7.5   | FAIR<br>FAIR<br>FAIR   |
| SAND BLUESTEM<br>WOODWARD                    | 5                | ŏ                             | Š                                  | 7                            | 1-3<br>1-3                      | 0-1        | 0-1            | 0-1      | 5.5-7.5              | FAIR-600D<br>FAIR-600D |
| SWITCHGRASS<br>BLACKWELL                     | 8                | 6                             | 5                                  | 5<br>5                       | 1-2<br>1-2                      | 0-5        | 0              | 0        | 5.5 <del>-8</del> .0 | 600D                   |
| COOL SEASON GRASSES<br>CREEPING FOXTAIL      | 5                | 7                             | .6                                 | 7                            | 1-2                             | 1-2        | 1-2            | 0-2      | 5.5-7.0              | PGOR                   |
| GARRISON<br>TALL-FESCUE<br>KENTUCKY 31       | 5<br>5<br>6<br>6 | 7<br>6<br>5                   | 7 6 7                              | 7<br>4                       | 1-2<br>1                        | 1-5        |                |          | 6.2-7.0              | POOR<br>POOR<br>POOR   |
| MEATGRASS                                    | 9                | .9                            | ,                                  | 4                            | •                               | 1 _        |                |          |                      |                        |
| INTERMEDIATE<br>SLATE                        | :4               | 0                             | 5                                  | 4                            | 1-2<br>1-2                      | 1-2        | 1-2            | 0-1      | 6.0-7.5              | FAIR<br>FAIR           |
| TALL   | 7                | 6                             | 2                                  | 4                            | 1-2                             | 1-5        | 1-2            | 0-1      | 7.0-8.5              | FAIR                   |
| ZOSE<br>Western<br>Barton                    | 7<br>.7          | 6<br>6                        | 5<br>5                             | 5<br>5                       | 1-2<br>1-3<br>1-3               | <b>4-1</b> | 0-1            | 0-1      | 6.5-8.5              | 600D<br>600D           |

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- 6 / Ph ROAGE LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

## (Eroded Clay)

Description: Deep, well drained to somewhat poorly drained, eroded soils

with clayey or thin loamy surfaces and clayey subsoils.

Limitations: Stand establishment on these soils is very difficult due to

clayey or thin surfaces. Low organic matter will limit fertility and plant production (causing difficult management

decisions).

Soils: Bethany silty clay loam, eroded

LRA: 79 SUITABILITY GROUP: F-3

-2-

| SPECIES                 |   | CIES<br>ILITY 1 /<br>IRRIGATED | SPECIES<br>PRODUC-<br>TIVITY<br>2_/ | GRAZING<br>PREFERENCE<br>3_/ | STAND<br>ESTABLISH-<br>MENT 4_/ |             | TILII<br>EDS : |     | Ph RANGE<br>6_/ | DADUGHT<br>TOLERANCE |
|-------------------------|---|--------------------------------|-------------------------------------|------------------------------|---------------------------------|-------------|----------------|-----|-----------------|----------------------|
| WARM SEASON GRASSES     |   |                                |                                     |                              |                                 |             |                |     |                 |                      |
| BIG BLUESTEN            | 4 | 6                              | 5                                   | 7                            | 2-3                             | 0-1         | 0              | 0   | 6.0-7.5         | FAIR-6000            |
| KAN                     | • | 6                              | <u>6</u>                            | 7                            | 2-3                             |             |                |     |                 | FAIR-600D            |
| INDIANGRASS<br>CHEYENNE | • | 6                              | 5                                   | 7                            | 1-3                             | 0           | 0              | 0   | 5.5-7.5         | FAIR                 |
| GSASE                   | • | 6                              | Ď                                   | 4                            | 1-3                             |             |                |     |                 | FAIR                 |
| SIDEDRIS GRAMA          | 3 | 6                              | 2                                   | 4                            | 1-3<br>1-3                      | <b>0</b> ⊦1 | 0              | ٥   | 6.0-7.5         | FAIR<br>600D         |
| EL RENO                 | 5 | ě                              | ă.                                  | 5                            | 1-3                             | 4.          | v              | ٠   | 0.0-1.7         | 60GD                 |
| Switch Grass            | 5 | Ğ                              | 5                                   | Š                            | i-ē                             | 0-5         | 0              | 0   | 5.5-8.0         | 6000                 |
| BLACKWELL               | 5 | 6                              | 6                                   | 5                            | 1-2                             | -1 -        | -              | •   |                 | 6300                 |
| COGL SERSON SRASSES     |   |                                |                                     |                              |                                 |             |                |     |                 |                      |
| TALL                    | 4 | 6                              | 5                                   | 4                            | 1-2                             | 1-2         | 1-2            | 0-1 | 7.0-8.5         | FAIR                 |
| JOSE                    | • | 6                              | 6                                   | 4_                           | 1-2                             |             |                |     |                 | FAIR                 |
| WESTERN<br>Barton       | 7 | 6                              | 4                                   | 5                            | 1-3<br>1-3                      | 0-1         | 0-1            | 0-1 | 6.5-8.5         | 6000                 |
| ann i UN                | 7 | ь                              | 3                                   | J                            | 1-3                             |             |                |     |                 | SOOD                 |

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- 6 / Ph RANGE LOW AND HIGH Ph RECOMMENDED FOR THE SPECIES.

(Clayey)

Description:

Deep and moderately deep, well drained to somewhat poorly drained soils with loamy or clayey surfaces and clayey subsoils. (If surface texture is loamy, it is less than

14 inches over dense clayey subsoil.)

Limitations: Slowly or very slowly permeable clayey subsoils

Soils: Bethany silt loam

Blanket silt loam Lubbock silt loam

Tabler loam, clay loam, complex

LRA: 79 SUITABILITY GROUP:

| SPECIES   | SPE<br>ADAPTAB<br>DRYLAND | CIES<br>ILITY 1 /<br>IRRIGATED | SPECIES<br>PRODUC-<br>TIVITY<br>2_/ | GRAZING<br>PREFERENCE<br>3_/ | STAND<br>ESTABLISH-<br>MENT 4_/ |                    | TILIZ<br>EDS 5 |     | Ph-RANGE<br>6_/    | BROUGHT<br>TOLERANCE           |
|---|---------------------------|--------------------------------|-------------------------------------|------------------------------|---------------------------------|--------------------|----------------|-----|--------------------|--------------------------------|
| HARM SEASON BRASSES<br>BIG BLUESTEM<br>KAN            | 5<br>5                    | 7                              | 5                                   | 7                            | 2-3<br>2-3                      | <b>Q-1</b>         | 0              | 0   | 6.0-7.5            | FAIR-600D<br>FAIR-600D<br>FAIR |
| INDIANGRASS<br>CHEYENNE<br>USAGE<br>SIDEDATS GRAMA    | 555546655                 | 7<br>7<br>7                    | 5<br>6<br>8                         | 7<br>7<br>5                  | 1-3<br>1-3<br>1-3<br>1-3        | <b>0</b> −1<br>0−1 | 0              | 0   | 5.5-7.5<br>6.0-7.5 | FAIR<br>FAIR<br>GOOD           |
| EL RENO<br>SWITCHBARSS<br>BLACKWELL                   | 6<br>5<br>5               | 7 7 7                          | 5 6                                 | 5555                         | 1-3<br>1-2<br>1-2               | 0-5                | 0              | 0   | 5.5-8.0            | 6000<br>6000<br>6000           |
| COOL SEASON ERASSES<br>SMOOTH BROMEGRASS<br>ACHENBACH | :3<br>3                   | 6                              | 6                                   | 7                            | 1 1                             | ¥-5                | 1-2            | 0-2 | 5.5-7.0            | FAIR<br>FAIR                   |
| LINCOLN<br>SOUTHLAND<br>TALL FESCUE<br>KENTUCKY 31    | 333322                    | 6<br>6<br>6<br>7<br>7          | 7<br>7<br>6<br>7                    | 7 7 4                        | 1<br>1<br>1<br>1                | 1-5                | 1-2            | 0-5 | 6.2-7.0            | FAIR<br>FAIR<br>POOR<br>POOR   |
| WHE9TERASS<br>TALL<br>JOSE<br>WESTERN                 | 5<br>5<br>6               | .6<br>6<br>.7                  | .5<br>6                             | 4 4 5                        | 1-2<br>1-2<br>1-3               | 1-2                |                |     | 7.0-8.5<br>6.5-8.5 | FAIR<br>FAIR<br>6000           |
| BARTON  | -6                        | 7                              | 5                                   | 5<br>5                       | 1-3                             | ₹ *                | • •            | * * | 2.2 2.0            | 6000                           |

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- 8 / In RANGE LOW AND HIGH PH RECOMMENDED FOR THE SPECIES.

(Wet Sodic)

Description:

Deep, somewhat poorly or poorly drained loamy soils with a high sodium absorption ratio. The subsoils range from sandy to clayey and contain a high water table during the winter

and/or spring months.

Choice of plants is limited by high sodium content and Limitations:

moderate salinity. Wetness during a portion of the growing

season is common.

Soils: Drummond complex

Natrustolls

Zenda saline, complex

LRA: 79 SUITABILITY GROUP: G-3 -5-

| Species  | SPE<br>ADAPTAB<br>DRYLAND | CIES<br>ILITY 1 /<br>IRRIGATED | SPECIES<br>PRODUC-<br>TIVITY<br>2_/ | GRAZING<br>PREFERENCE<br>3_/ | STAND<br>ESTABLISH-<br>MENT 4_/ |            | TILIZ<br>EDS 5<br>p |   | Ph RANGE<br>6_/    | DROUGHT<br>TOLERANCE         |
|--|---------------------------|--------------------------------|-------------------------------------|------------------------------|---------------------------------|------------|---------------------|---|--------------------|------------------------------|
| WARM SEASON BRASSES<br>ALKALI SACATON<br>SALTALK<br>SHITCHGRASS<br>BLACKWELL | 6<br>6<br>7<br>7          | 0<br>0<br>0                    | 4<br>5<br>5<br>6                    | 2<br>2<br>5<br>5             | 2-3<br>2-3<br>1-2<br>1-2        | 0-1<br>0-1 | 0                   | 0 | 6.5-8.0<br>5.5-8.0 | 600D<br>600D<br>600D         |
| COOL SZASON GRASSES WHEATGRASS TALL JOSE WESTERN BARTON                      | 7<br>7<br>5<br>5          | 0<br>0<br>0                    | 5<br>6<br>4<br>5                    | 4<br>4<br>5<br>5             | 1-2<br>1-2<br>1-3<br>1-3        | 1-2<br>0-1 | 1-2<br>0-1          |   | 7.0-8.5<br>6.5-8.5 | FAIR<br>FAIR<br>600D<br>600D |

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- 6 / Phi RANGE LOW AND HIGH Phi RECOMMENDED FOR THE SPECIES.

## (Not Suitable)

This group includes various textures and phases of soils and land types which occur on a wide range of slopes and Description:

topography.

Soils in this group are generally too shallow, erosive, Limitations:

gravelly, stony, or rocky; too steep, droughty, wet, clayey, or saline and alkaline for good survival or growth of

pasture species.

Soils: Blowout land

Sandy breaks

Recommended Species: See Standards and Specifications for Critical Area Planting (342).